

Site Summary Update

TESORO ALASKA REFINERY

Alaska Department of Environmental Conservation • Division of Spill Prevention and Response

Site Description

The Tesoro Alaska Refinery is located on a 230 acre plot in a rural area north of Kenai on Mile 21.5 North Kenai Road. The facility has been in operation since 1970 and refines crude oil to produce fuel oil, diesel, jet fuel, gasoline, and propane. A 1980 study indicated that Tesoro had disposed of wastes from crude oil storage tanks and separators into three pits on the refinery property.

Threats and Contaminants

Soil and groundwater are contaminated with petroleum hydrocarbons (Jet A fuel, crude oil, diesel fuel and gasoline). There is floating product on the groundwater.

Public Health and Environmental Concerns

Drinking water wells on neighboring properties have been contaminated with petroleum hydrocarbons. The contamination plume has migrated through neighboring industrial properties and is heading toward a bluff overlooking Cook Inlet.

Response Actions

In 1976, Tesoro constructed protective fencing around two oily sludge pits.

In 1988, product recovery wells were constructed to remove petroleum from the groundwater. Pits were backfilled and capped. Soil contaminated by fuel spills was excavated and stockpiled. Tesoro began operation of product recovery wells.

In 1994, Tesoro began a two-year thermal remediation project of the contaminated soil in the contaminated soil containment area.

A Resource Conservation and Recovery Act Post-Closure Permit was jointly issued by ADEC and EPA in September 1995. Tesoro corrective actions have been following the stipulations of the Permit since it was issued.

Since the issuance of the Permit, Tesoro has investigated to further determine sub-surface conditions in the Phillips Interim Remediation Measures Area. They have conducted corrective actions to control and reduce bluff seepage due to migration of the contaminant plume. Tesoro has also initiated several pilot studies to determine the best means of controlling and cleanup of the migrating plume.

The contaminated drinking water wells on neighboring properties were abandoned and new wells were installed.

Current Status

Tesoro is continuing operation of the groundwater product recovery systems and investigation of site conditions.